

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A stent system for placement in a body lumen which is expandable from a contracted state to an expanded state, comprising:
a stent having a ~~sandblast~~, roughened exterior surface, a ~~sandblast~~, roughened interior surface, and side surfaces, wherein at least a portion of the exterior surface and the interior surface is roughened to a predetermined extent for coating ~~with; and~~
a polymer-free external coating consisting of a therapeutic agent disposed directly on the exterior or interior surface of the stent.
2. (Canceled).
3. (Previously Presented) The stent system according to claim 1, wherein at least a portion of the side surfaces is roughened to a predetermined extent.
4. (Currently Amended) The stent system according to claim 3, wherein the therapeutic agent comprises Tacrolimus and the external coating is ~~exterior surface, the interior surface, or the side surfaces are coated with Tacrolimus as the therapeutic agent~~ loaded directly to the roughened surface of the exterior surface, the interior surface, or the side surfaces.
5. (Original) The stent system according to claim 1, wherein the said stent comprises a stainless steel.
6. (Original) The stent system according to claim 1 further comprising a balloon catheter for delivering the stent.
- 7-20. (Canceled).

21. (Previously Presented) The stent system according to claim 1, wherein the roughened surface is prepared by sandblasting with at least one of sand, glass beads, or corundum.

22. (Previously Presented) The stent system according to claim 21, wherein the sandblasting removes imperfections from the roughened surface.

23. (Previously Presented) The stent system according to claim 21, wherein burrs are removed from the stent before sandblasting such that the sandblasting produces a roughened more uniform surface with increased flow dynamics and less turbulence.

24. (Previously Presented) The stent system according to claim 23, wherein the removing of burrs comprises removing the imperfections by electropolishing.

25. (Previously Presented) The stent system according to claim 21, wherein the sandblasting includes sand.

26. (Previously Presented) The stent system according to claim 21, wherein the sandblasting includes glass beads.

27. (Previously Presented) The stent system according to claim 21, wherein the sandblasting includes corundum particles.

28. (Currently Amended) The stent system according to claim 27, wherein one or more ~~the roughened surface includes the~~ corundum particles are disposed directly on a roughened surface of the stent.

29-30. (Canceled).

31. (Currently Amended) The stent system according to claim 28, wherein the therapeutic agent comprises ~~roughened surface with corundum particles is coating with~~ Tacrolimus.

32. (Previously Presented) The stent system according to claim 31, wherein the Tacrolimus is coated onto the roughened surface by spraying the therapeutic agent on said surface.

33. (Currently Amended) The stent system according to claim 32, wherein the stent is annealed ~~after the surface has been roughened so as to increase the flexibility of the stent.~~

34. (Currently Amended) A stent system for placement in a body lumen which is expandable from a contracted state to an expanded state and configured for delivery of a therapeutic agent without the aid of a polymer coating, comprising:

a stent having a ~~[[sandblast-]]~~roughened and annealed exterior surface, an interior surface, and side surfaces, wherein at least a portion of the exterior surface ~~and the interior surface~~ is roughened to a predetermined extent for coating with a therapeutic agent; and

a polymer-free external coating disposed directly on at least a portion of the roughened and annealed exterior surface of the stent, the external coating comprising a therapeutic agent and forming the outermost peripheral surface of the stent system.

35. (Currently Amended) The stent system according to claim 34, wherein at least a portion of the interior surface and side surfaces is roughened to a predetermined extent.

36. (Currently Amended) The stent system according to claim 35, wherein the external coating comprises Tacrolimus loaded directly to the roughened surface of the exterior surface, the interior surface, or the side surfaces ~~are coated with Tacrolimus as the therapeutic agent loaded directly to the roughened surface.~~

37. (Currently Amended) The stent system according to claim 34, wherein the ~~[[sandblast-]]~~roughened and annealed exterior surface includes sandblasting particles.

38. (Previously Presented) The stent system according to claim 37, wherein the sandblasting particles comprise sand.

39. (Currently Amended) A stent system for placement in a body lumen which is expandable from a contracted state to an expanded state, comprising:

a stent having a ~~[[sandblast-]]~~roughened and annealed exterior surface, a ~~[[sandblast-]]~~roughened and annealed interior surface, wherein at least a portion of the exterior surface and the interior surface is roughened to a predetermined extent for coating with a therapeutic agent and includes sandblasting particles; and

a polymer-free external coating disposed on and abutting at least a portion of the exterior surface and interior surface of the stent, the external coating comprising a therapeutic agent forming an outermost peripheral surface of the stent system at the at least a portion of the exterior surface and interior surface.

40. (Previously Presented) The stent system according to claim 39, wherein at least a portion of the side surfaces is roughened to a predetermined extent.

41. (Previously Presented) The stent system according to claim 40, wherein the exterior surface, the interior surface, or the side surfaces are coated with Tacrolimus as the therapeutic agent loaded directly to the roughened surface.

42. (Previously Presented) The stent system according to claim 39, wherein the sandblasting particles comprise sand.